System Information
Si 027G/03/ae

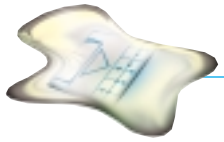
4120 Multi-Element Temperature Transmitter

Highly accurate and effective transmission of temperature data

Online
www.systems.endress.com

Endress+Hauser
Systems & Gauging

4120 Multi-Element Temperature Transmitter



The 4120 Multi-Element Temperature Transmitter (METT) is designed to be used with a standard single Averaging Temperature Bulb or up to 10 Spot RTDs and integrate into an inventory management system via:

- Any Endress+Hauser tank gauge with HART® communication capabilities, such as the Proservo NMS 53x
- The Endress+Hauser Model 4200 Multi-Function Transmitter for tankside integration
- The Endress+Hauser Model 4000 Advanced Technology Transmitter connected to a mechanical float gauge
- Any other manufacturer's inventory management instrumentation or host system with HART® communication capabilities

User selectable options
When provided with the tank level by the host system or tankside integration device, the METT selects the input of all elements to the host. It is also possible to select inputs from the longest submerged element from an averaging bulb, or the METT can average the inputs from multiple spot RTDs. The METT converts the resistance values to engineering units and transmits the information over a HART® or ATTI communication field bus.

Designed to meet FM, CSA and CENELEC intrinsically safe approvals, the METT is housed in a NEMA 4X enclosure. A junction box is included with terminal connections for RTDs, Handheld Interface Units and a HART® Bus.

At a glance

Mounts on averaging temperature bulb and selects longest submerged element

Averages input from up to 10 spot RTDs

Converts resistance values to engineering units and communicates to host

Communicates over HART® Bus

Intrinsically safe with NEMA 4X enclosure

Provides galvanic isolation and lightning protection between the HART® Bus and temperature elements

Power consumption
15 to 65 V_{dc}

Current draw
4 mA constant current

Lightning protection
Designed to meet IEEC C62.1

Operating and storage temperature
-40 °F to +185 °F (-40 °C to +85 °C)

Operating humidity
0 to 100%

Weight
6 lb (3 kg)

Accuracy
+/- 0.5 °F (+/-0.25 °C)

Safety certifications and approvals
Intrinsically safe approvals for Class I, Div 1, Groups B&C
Designed to meet FM, CSA and CENELEC

RTD inputs supported
100 Ohm copper,
100 Ohm platinumized copper and
100 Ohm platinum (DIN)
Four and three wire elements are supported.

Enclosure
NEMA 4X, Fiber Reinforced Resin

Performance
Accuracy, repeatability and sensitivity per American Petroleum Institute Manual of Petroleum Measurement Standards, Chapter 7, Section 7.4, fourth draft, Dec. 3, 1990.

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